IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re Applicant:

Vivian I. TEICHBERG

Serial No.:

10/522,415

Filed:

January 26, 2005

For:

METHOD AND COMPOSITION FOR PROTECTING

NEURONAL TISSUE FROM DAMAGE INDUCED

BY ELEVATED GLUTAMATE LEVELS

Examiner: unknown

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Group Art Unit: 1615

Attorney

Docket: 29147

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a PTO Form 1449 which lists citations which may be material to the patentability and examination of the above identified application. Also enclosed are copies of the references cited. These are submitted in compliance with the duty of disclosure defined in 37 CFR 1.56. The Examiner is requested to make these citations of official record in this application.

This Information Disclosure Statement under 37 CFR 1.56 is not to be construed as a representation that a search has been made, that additional matter which is material to the examination of this application does not exist, or that any or more of these citations constitutes prior art.

Respectfully submitted,

Martin D. Moynihan

Registration No. 40,338

Dated: December 22, 2005

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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	Substitute for form 1449A/PTO				Complete if Known					
					Application Number	10/522,415				
INFORMATION DISCLOSURE					Filing Date	July 31, 2003				
	SIAI	TEMENT BY APP	LICAN	NT.	First Named Inventor	Vivian I. TEICHBERG				
(use as many sheets as necessary)					Art Unit	1615				
					Examiner Name	unknown				
Sheet		1	of	3	Attorney Docket Number	29147				
	U.S. PATENT DOCUMENTS									
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	1	PCT WO 99/21565	06-6-1999	Blass et al.		
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Translation is attached.

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	INF	ORMATION DISCLOSURE	Filing Date	July 31, 200)3		
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Sheet	72	Of 3	Attorney Docket Number	29147			
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Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the	article (when appropriate) title	of the			
Initials	No.1	item (book, magazine, journal, serial symposium, catalog, etc.) da publisher, city and/or country where p	ate, page(s), volume-issue numb published.	per(s),	T ²		
	2	Matthews et al. "Enzymatic Degradation Protects Neur Excitotoxicity", Journal of Neurochemistry, 75(3): 104	rons From Glutamate 45-1052, 2000.				
	3	Jiang et al. "Glutamate Is A Principal Mediator of HIV					
		Competent Human Macrophage Neurotoxicity", Socie		racts.			
		26(1-2), Abstract No. 136.17, 30th Annual Meeting of					
		New Orleans, USA, 2000.	,	,			
	4	Di Giorgio et al. "Gabaergic Systems in Brain Regions		Rats",			
		Italien Journal of Biochemistry, 34(1): 19-28, 1985. P.					
	5	Engelhardt et al. "The Diagnostic Value of Enzyme De Fluid", Medizinische Klinik, München, 71(17): 699-70		oinal			
	6	Andrae et al. "Pyruvate and Related α-Ketoacids Prote		ulture			
		Against Hydrogen Peroxide-Induced Cytotoxicity", To 1985.					
	7	Avramis et al. "A Randomized Comparison of Native	Escherichia Coli Asparag	ginase			
		and Polyethelyne Glycol Conjugated Asparaginase for	Treatment of Children W	Vith			
		Newly Diagnosed Standard-Risk Acute Lymphoblastic		;			
		Cancer Group Study", Blood, 99(6): 1986-1994, 2002.					
	8	Cavallini et al. "The Protective Action of Pyruvate on					
		Heart: Comparison With Other Oxidizable Substrates"	', Journal of Molecular Ce	ell			
		Cardiology, 22: 143-154, 1990.					
	9	Desagher et al. "Pyruvate Protects Neurons Against H		d			
		Toxicity", The Journal of Neuroscience, 17(23): 9060-					
	10	Gramsbergen et al. "Pyruvate Protects Against 3-Nitro in Corticostriatal Slice Cultures", Neuropharmacology					
	11	Hosoya et al. "Blood-Brain Barrier Produces Significa	nt Efflux of L-Aspartic A	cid			
		But Not D-Aspartic Acid: In Vivo Evidence Using the Brain Efflux Index Method",					
		Journal of Neurochemistry, 73: 1206-1211, 1999.		,			
-	12	Lee et al. "Protection by Pyruvate Against Transient F	orebrain Ischemia in Rats	<u>;".</u>			
		The Journal of Neuroscience, 21(RC171): 1-6, 2001.					
	13	Liu et al. "P-Glycoprotein Regulated Transport of Glu-	tamate at Blood-Brain Ba	ırrier",			
		Acta Pharmacol Sin, 22(2): 111-116, 2001.					
	14	Matsumoto et al. "Role of Pyruvate in Ischemia-Like (Conditions on Cultured				
		Neurons", Neurological Research, 16: 460-464, 1994.		,			
	15	Matthews et al. "Glutamate-Pyruvate Transaminase Pr		;			
		Toxicity in Hippocampal Slices", Brain Research, 978					
	16	Matthews et al. "Enzymatic Degradation Protects Neur					
		Excitotoxicity", Journal of Neurochemistry, 75: 1045-	1052, 2000.				
	17	Maus et al. "Pyruvate and Lactate Protect Striatal Neur	rons Against N-Methyl-D)-			
		Aspartate-Induced Neurotoxicity", European Journal of	of Neuroscience, 11: 3215	i-			
	1	3224, 1999.					
	18	Mongan et al. "Pyruvate Improves Cerebral Metabolis					
	10	Shock", AJP - Heart and Circulatory Physiology, 281:					
	19	Mongan et al. "Intravenous Pyruvate Prolongs Surviva	II During Hemorrhagic Sh	nock			
	100	in Swine", AJP - Heart and Circulatory Physiology, 27	//(46): H2253-H2263, 19	99.			
	20	O'Kane et al. "Na+-Independent Glutamate Transporte	ers (EAAT1, EAAT2, and	1			
	1	EAAT3) of the Blood-Brain Barrier", The Journal of E	Biological Chemistry, 274	1(45):			
		31891-31895, 1999.					

6	PEWO			
/ [3000	21	Ruiz et al. "Protection by Pyruvate and Malate Against Glutamate-Mediated	
l of	C 2 8 2005 H		Neurotoxicity", NeuroReport, 9: 1277-1282, 1998.	
\a 1	E)	22	Ryu et al. "Neuroprotective Effects of Pyruvate in the Quinolinic Acid Rat Model of	
18			Huntington's Disease", Experimental Neurology, 183: 700-704, 2003.	
	TRADENIN	23	Steele "Blood-Brain Barrier Transport of the α-Keto Acid Analogs of Amino Acids",	
			Federation Proceedings, 45(7): 2060-2064, 1986	
		24	Stover et al. "Neurotransmitters in Cerebrospinal Fluid Reflect Pathological	
i			Activity", European Journal of Clinical Investigation, 27: 1038-1043, 1997.	
Γ		25	Wolff et al. "The Effectiveness of Benzoate in the Management of Seizures in	
			Nonketotic Hyperglycinemia", AJDC, 140: 596-602, 1986.	
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Signature	Considered	

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